Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

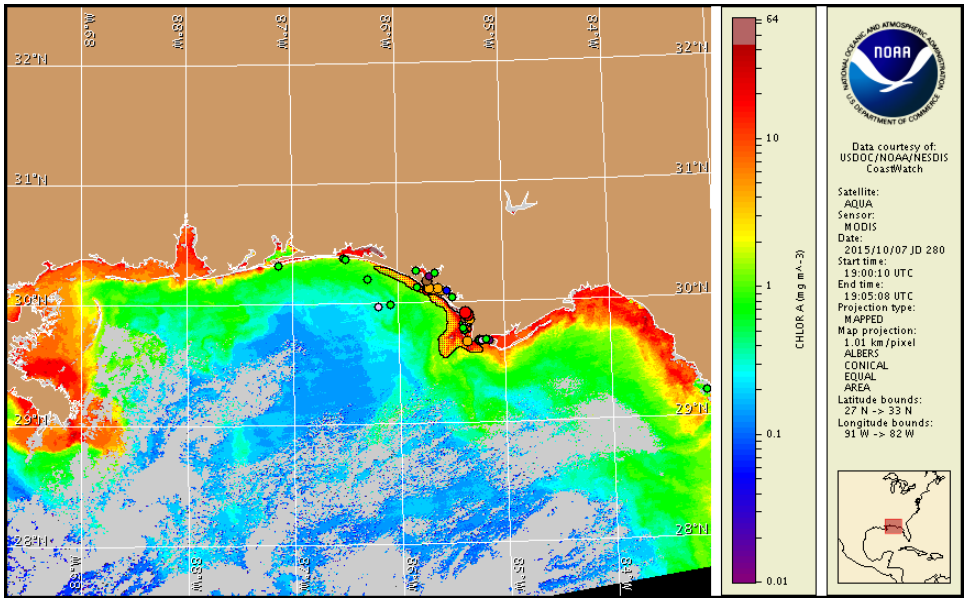
Thursday, 08 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 5, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from September 28 to October 7: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore northwest Florida Thursday, October 8 to Tuesday, October 13 is listed below:

County Region: Forecast (Duration)
Bay County: Moderate (Th), High (F-Sa, M-Tu), Low (Su)
Bay County, bay regions: Moderate (Th-Tu)
Gulf County: Moderate (Th), High (F-Sa, M-Tu), Low (Su)
Gulf County, west bay regions-St. Joseph Bay area: Low (Th), Moderate (F-Tu)
Gulf County, east bay regions-Indian Lagoon area: Low (Th-Tu)
Franklin County, bay regions: Very Low (Th-Tu)
All Other NWFL County Regions: None expected (Th-Tu)
SWFL County Regions: Visit http://tidesandcurrents.noaa.gov/hab/#swfl

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Reports of dead fish have been received from alongshore Bay County this week.

Analysis

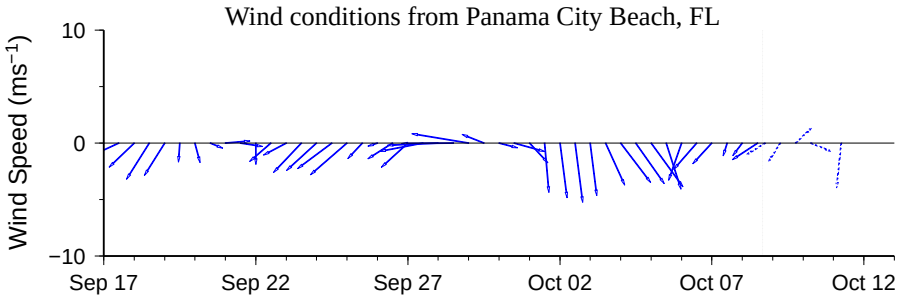
Due to the upcoming federal holiday, the next bulletin will be issued on Tuesday, October 13.

Recent samples collected last week from along- and offshore northwest Florida (Escambia to Taylor counties) indicated not present to 'high' concentrations of *Karenia brevis*. Sampling continues to indicate *K. brevis* from Bay to Franklin counties with the highest *K. brevis* concentrations located alongshore Bay and Gulf County (FWRI; 10/5). Sampling in the St. Joseph Bay region of Gulf County indicated that *K. brevis* concentrations have increased to 'medium' (FWRI; 10/5). Reports fish kills have been received from Bay County this week.

In recent ensemble imagery (MODIS Aqua, 10/7), a feature of elevated to very high chlorophyll (2 to >20 μg/L) with the optical characteristics of *K. brevis* is visible alongshore northwest Florida from Walton to Franklin counties, and up to 30 miles west-southwest of the St. Joseph Peninsula where up to 'high' *K. brevis* concentrations have been detected.

Variable winds forecast alongshore northwest Florida today through Monday will minimize transport of *K. brevis* concentrations.

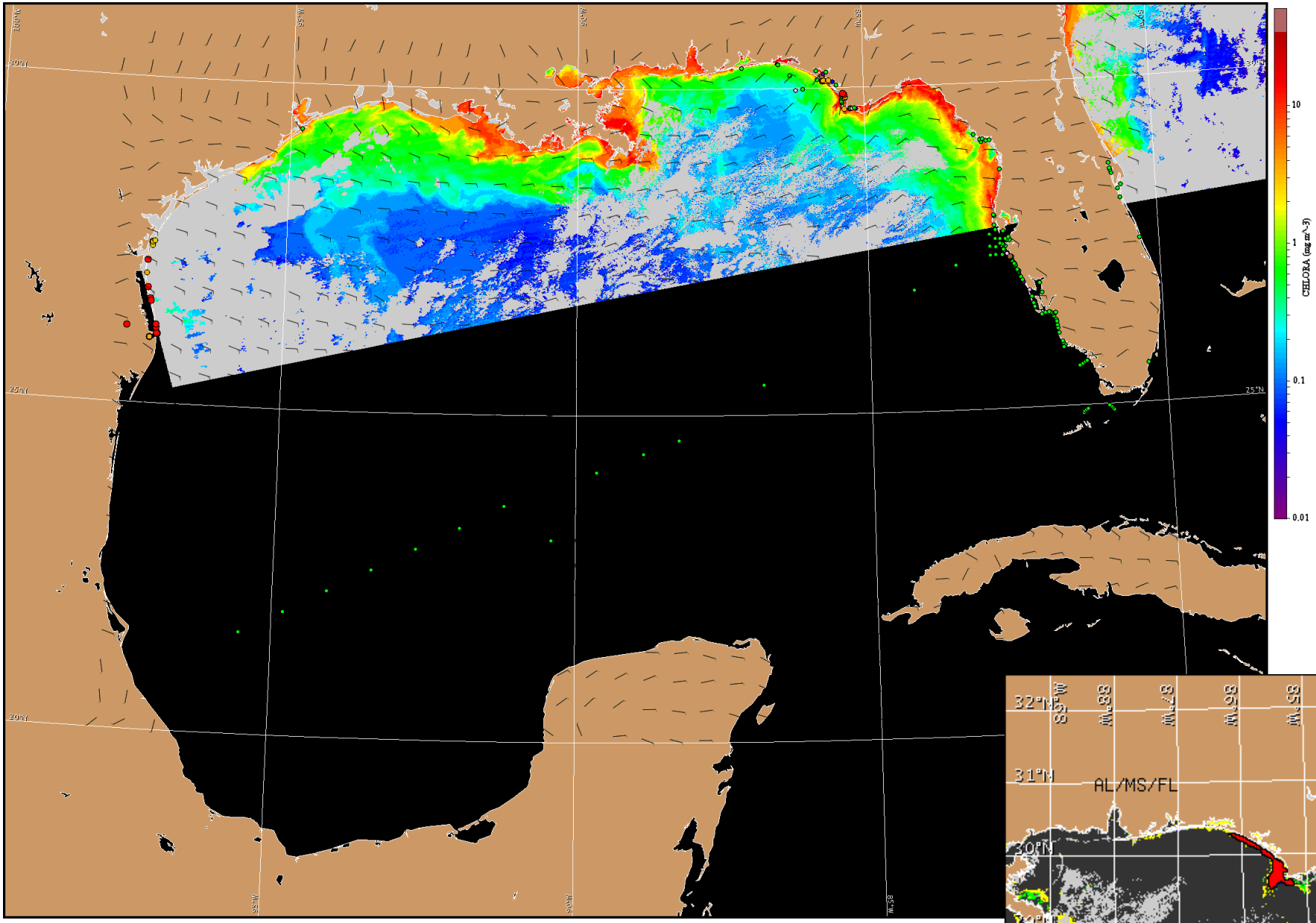
Davis, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Taylor counties: East winds (10kn-15kn, 5-8m/s) today through Friday becoming southwest winds (5-10kn) Friday afternoon. Northwest winds (10kn, 5m/s) Friday night becoming west winds (10-15kn) Saturday. North winds (10-15kn) Saturday night through Sunday becoming northeast winds (5-10kn) Sunday night and Monday.



Satellite chlorophyll image and forecast winds for October 9, 2015 06Z with points representing cell concentration sampling data from September 28 to October 7: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
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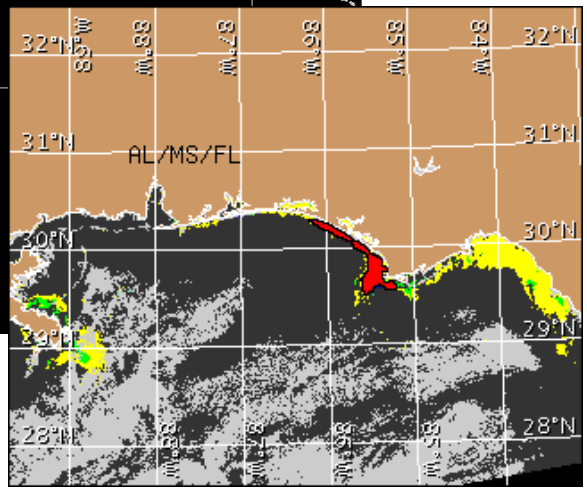

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).